

a storage table, separate from the first random-access storage unit, to store a write time and a write address of the broadcast video image data in the first random-access storage unit, according to the control unit,

wherein said control unit stores a write address and a write time of said first random-access storage unit into the storage table whenever a predetermined amount of said received broadcast video image data is stored in said first random-access storage unit, searches a write address of said indicated video image data from said storage table according to said indicated time, and reads said indicated video image data according to said searched write address.

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 1 and 12 have been amended. Claims 1, 3, 5-12, 14-16 and 22-24 are pending and under consideration.

REJECTION UNDER 35 U.S.C. §103:

Claims 1, 5, 10-12, 14-16 and 22-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,301,427 to Kazo in view of U.S. Patent 4,982,390 to Tanaka

Using independent claim 1 as an example, this claim recites " a storage table, separate from the first storage unit, to store a write time and a write address of the broadcast video image data in the first storage unit, according to the control unit." Thus, both the first and second storage units store video data. Specifically, the first storage unit stores the received broadcast video image data and the second storage unit stores the indicated video image data. The storage table is separate from the first storage unit, and stores information regarding the broadcast video image data in the first storage unit. Thus, the first and second storage units both store video data, and the storage table is separate from the first and second storage units.

According to the Examiner, the memories 13 and 14 of Kazo correspond to the claimed first and second storage units. However, memory 13 does not store video data, but instead

stores management information. Consequently, the memory 13 is not separate from a storage table, but instead stores time information therein.

Specifically, Kazo teaches a VTR recording/reproducing system having a VTR auto changer 22, a memory 14 for storing still picture data of each VTR, a memory 13 for storing recording hysteresis information such as VTR tape number, recording start time, recording end time and title of each VTR, and a CPU 11 for recording base-band picture signals into the VTR. Kazo, col. 5, line 30 to col. 6, line 49. The still picture data is recorded at an interval set by a user using the remote interfacing 16. The user views the still picture data in the memory 14 and selects the desired recorded program from among numerous recorded programs in the VTR.

Thus, Kazo discloses a VTR recording/reproducing system for recording an outer base-band picture signal in the VTR with the memory 14 storing recorded still pictures and memory 13 storing management information. In order to select a desired recorded program in the VTR, the user views the still picture in the memory 14 and selects the recorded program from the still picture, thereby the desired program is reproduced from the VTR corresponding to the still picture using the management information in memory 13.

Therefore, it is respectfully submitted that the claimed first storage unit does not correspond to the memory 14 of Kazo, and the claimed second storage unit does not correspond to the memory 13 of Kazo. This is because the memory 14 stores only still pictures of received picture signals and memory 13 stores only recorded hysteresis information of the VTR. So, Kazo fails to disclose first and second storage units, and a storage table.

Using independent claim 1 as an example, this claim further recites "a control unit, comprising a time designation unit, controlling said first storage unit so as to store said received broadcast video image." As discussed above, Kazo does not teach or suggest these features.

Thus, Kazo does not teach or suggest the features of claim 1 regarding the time designation unit and the separate storage table. It is respectfully submitted that Tanaka does not overcome these deficiencies in Kazo. Furthermore, it is noted that the Examiner does not rely upon Tanaka for this purpose, but instead relies upon this reference as teaching a FIFO storage unit.

Accordingly, independent claim 1, and claims 5, 10-11 and 22-24 are patentable over Kazo and Tanaka. Independent claim 12, and claims 14-16 depending therefrom, are similarly patentable over Kazo and Tanaka.

Claim 3 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kazo in view of Tanaka and further in view of WO 92/22983 to Browne et al. Claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kazo in view of Tanaka and further in view of U.S. Patent 5,488,409 to Yuen et al. Claims 7-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kazo in view of Tanaka and Yuen '409 in view of U.S. Patent 5,335,079 to Yuen et al.

Claims 3, 6 and 7-9 depend from independent claim 1 and are therefore patentable over Kazo and Tanaka for at least the above reasons. It is respectfully submitted that Yuen et al. ('409), Browne et al., and Yuen et al. ('079) do not overcome the deficiencies in Kazo and Tanaka. Browne et al. is relied upon as teaching multiple channels, and Yuen et al. '409 is relied upon as teaching determining video image data which is recorded with highest probability in the list as the video image data to be played back. Accordingly, claims 3, 6 and 7-9 are patentable over the Examiner's cited references.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

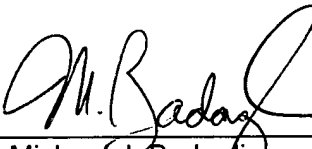
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: 3-4-03

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CERTIFICATE UNDER 37 CFR 1.8(a)
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231
on March 4, 2003
STAAS & HALSEY
By: Paula K. Cullen
Date: March 4, 2003

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please **AMEND** claims 1 and 12 as follows:

1. (FIVE TIMES AMENDED) A broadcast video image recording apparatus to record broadcast video image data, comprising:
 - a receiver receiving broadcast video image data for viewing;
 - a first storage unit storing said received broadcast video image data according to a FIFO sequence;
 - a second storage unit storing an indicated video image data in said stored received broadcast image data of said first storage unit;
 - indicating means for indicating said video image data to be played back;
 - a control unit, comprising a time designation unit, controlling said first storage unit so as to store said received broadcast video image, and for searching and reading said indicated video image data which have been stored in said first storage unit, and storing the indicated video image data in said second storage unit according to said indication of said indicating means; and
 - a storage table, separate from the first storage unit, to store a write time and a write address of the broadcast video image data in the first storage unit, according to the control unit, wherein said control unit stores the write address and the write time of said first storage unit into said storage table whenever a predetermined amount of said received broadcast video image data is stored in said first storage unit, searches a write address of said indicated video image data from said storage table according to an indicated time of said indicating means, and read said indicated video image data according to said searched write address.

12. (FOUR TIMES AMENDED) A broadcast video image recording apparatus to record broadcast video image data comprising:

a first random-access storage unit storing received broadcast video image data according to a FIFO sequence;

a second storage unit storing an indicated video image data in said stored received broadcast image data of said first random-access storage unit;

a control unit, comprising a time designation unit, controlling said first storage unit so as to store said received broadcast video image, searching and reading said indicated video image data which has been stored in said first random-access storage unit, and storing the indicated video image data in said second storage unit at a time indicated for recording; and

a storage table, separate from the first random-access storage unit, to store a write time and a write address of the broadcast video image data in the first random-access storage unit, according to the control unit,

wherein said control unit stores a write address and a write time of said first random-access storage unit into the storage table whenever a predetermined amount of said received broadcast video image data is stored in said first random-access storage unit, searches a write address of said indicated video image data from said storage table according to said indicated time, and reads said indicated video image data according to said searched write address.